

WHAT IS CLAIMED IS:

1. A semiconductor laser device formed on a tilted substrate composed of a compound semiconductor, comprising an active layer and two cladding layers  
5 interposing the active layer therebetween,  
    wherein one of the cladding layers forms a mesa-shaped ridge,  
    the ridge includes a first region where a width of a bottom portion of the ridge is substantially constant, and a second region where the width of the bottom portion of the ridge is varied continuously, and  
10      the second region is placed between the first region and an end face in an optical path.
2. The semiconductor laser device according to claim 1, wherein the width of the bottom portion of the ridge in the second region is increased with distance  
15 from the first region.
3. The semiconductor laser device according to claim 1, wherein the second region is placed between the first region and one end face in the optical path, and between the first region and the other end face in the optical path.  
20
4. The semiconductor laser device according to claim 1, wherein the width of the bottom portion of the ridge in the first region is in a range of 1.8  $\mu\text{m}$  to 2.5  $\mu\text{m}$ .
- 25 5. The semiconductor laser device according to claim 1, wherein the width of the bottom portion of the ridge in the second region is in a range of 2.4  $\mu\text{m}$  to 3  $\mu\text{m}$ .
6. The semiconductor laser device according to claim 1, wherein, at a  
30 boundary between the first region and the second region, the width of the bottom portion of the ridge in the first region is substantially the same as that in the second region.
7. The semiconductor laser device according to claim 1, wherein a difference  
35 between the width of the bottom portion of the ridge in the first region and a maximum value of the width of the bottom portion of the ridge in the second region is 0.5  $\mu\text{m}$  or less.

8. The semiconductor laser device according to claim 1, wherein the active layer is formed of a quantum well structure.
- 5 9. The semiconductor laser device according to claim 1, wherein the active layer in a vicinity of the end face in the optical path is disordered by diffusion of impurities.
- 10 10. An optical pickup apparatus, comprising a semiconductor laser device and a light-receiving portion for receiving light output from the semiconductor laser device and reflected from a recording medium,  
wherein the semiconductor laser device is formed on a tilted substrate composed of a compound semiconductor, and includes an active layer and two cladding layers interposing the active layer therebetween,  
15 one of the cladding layers forms a mesa-shaped ridge,  
the ridge includes a first region where a width of a bottom portion of the ridge is substantially constant, and a second region where the width of the bottom portion of the ridge is varied continuously, and  
the second region is placed between the first region and an end face in  
20 an optical path.
11. The optical pickup apparatus according to claim 10, further comprising a light-splitting portion for splitting the reflected light,  
wherein the light-receiving portion receives the reflected light split by  
25 the light-splitting portion.
12. The optical pickup apparatus according to claim 10, wherein the semiconductor laser device and the light-receiving portion are formed on the same substrate.
- 30 13. The optical pickup apparatus according to claim 12, further comprising an optical element,  
wherein the optical element reflects light output from the semiconductor laser device in a direction normal to a principal plane of the  
35 substrate.
14. The optical pickup apparatus according to claim 13, wherein the optical

element is a reflection mirror.